

# Quality of Medical Care

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IN OPENING a discussion of quality—that much sought after and much-to-be-desired attribute of medical care—I recall the old story of the six blind men who tried to describe an elephant. I do not mean to suggest that all of us who attempt to define or measure or improve the quality of medical care are blind. But all of us—practicing physicians and medical society executives; administrators of health services in hospitals, medical care plans, health departments; the insurance industry; management; labor and the general public—all of us could stand to have our vision, particularly our peripheral vision, improved. This would lead to better understanding of the elements that go to make up quality and thereby would help to achieve the high quality performance to which we all aspire.

## Description of Quality

Each of us identifies the elephant in terms of his own experience and interests. The physician wants to practice good scientific medicine, to be busy, challenged, and respected, but not worked to death by overload of patients, harassed by administrators or regimented by government—any government! The health administrator wants his organization—hospital, health department, medical care plan—to provide useful service efficiently and economically, with good “public image,” with competent, diligent medical and other staff, and with clientele who are well enough informed to use the services intelligently and to assume proper responsibility for their own health protection. Insurers want valid—not padded—claims for needed services, not unnecessary surgical procedures or days of hospitalization which keep them in hot water over spiraling rates. Management and labor, whose dollars in varying proportions are going systematically and increasingly to purchase medical care benefits on a prepaid basis, want the most scientific and the most comprehensive health care that modern knowledge can provide for the premiums paid. They want effective health maintenance and restorative services of assured “quality” for the hard dollars they commit. The consumer, John Q. Public, wants to be healthy. When health

• Quality of medical care may be considered under three headings: (1) how to describe or define it; (2) how to measure it; (3) how to achieve it.

The profession, the health administrator, the consumer, and others, in attempting to define quality of medical care are like the blind men describing an elephant, because of their different viewpoints. Quality is not an absolute but a goal.

Measurement is, therefore, piecemeal and judgmental, and various attributes of quality have been studied—clinical, records, economy, effect on health status. One must study to relate the phenomenon measured to the goal.

Methods of improving quality are implicit in the descriptions and in the attributes measured. Prepaid group practice is an effective and a growing method of bringing comprehensive health care with quality control to the American people.

fails, he wants it restored with the efficiency and skill he has been taught that modern medicine can provide, and with dignity and respect of himself as a person and under economic arrangements that do not bankrupt or pauperize him or his family.

These wishes and expectations—all of them legitimate—exemplify the need for improving our peripheral vision regarding quality of medical care. Even the time-honored concept of physician-patient relationship is not simple. Certainly it is not within the exclusive control of the physician; it is influenced and modified by many other forces—economic, environmental and personal.

I should like, then, to consider the subject of quality of medical care under three headings: (1) Description, which I have already introduced; (2) How to measure it; (3) How to achieve it.

With further regard to description, I should like to quote Dr. C. B. Esselstyn, president of Group Health Association of America, in correspondence with the chairman of the American Medical Association's Committee on Medical Care for Industrial Workers. On August 3, 1960, Dr. Esselstyn wrote: “The best criterion for evaluating the quality of medical care I know of is the degree to which it is available, acceptable, comprehensive, documented and continuous and the extent to which adequate therapy is based on an accurate diagnosis and not symptomatology.”

This definition encompasses most of the aspira-

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tions I have attributed to those variously concerned with quality of care. Availability, acceptability, comprehensiveness, and continuity encompass the consumer's concern with getting a physician in an emergency, with financing, with fragmentation of his care among specialists and agencies, and with personal attention. Documentation by good medical records, and adequate therapy related to diagnosis and not merely symptomatology, are the essence of scientific medicine. The only consideration that might be added is that to realize its full potential, high quality medical care must be used intelligently by the consumer, who has a responsibility for his own health maintenance that cannot be sloughed to any physician or institution.

#### Measurement of Quality

From the complexities we have identified in attempting to define or describe quality, it follows that measurement will also be as complex. There have been many studies of quality of medical care. Rather than attempt an encyclopedic review, I shall identify some of the principles that have been developed and some of the indices that have been applied.

#### PRINCIPLES

Sheps<sup>13</sup> pointed out that a principle basic to the measurement of quality is that the reasons for seeking quality and for measuring it must be understood and acknowledged, because these reasons will affect the techniques and focus of measurement. Any health activity—by personal physician, hospital, health department, rehabilitation center—has as its broad objective the reduction of morbidity and mortality. There are, however, a list of subsidiary objectives which are assumed to be important steps toward meeting the broad objective, such as to provide better facilities, improve medical records, eliminate unnecessary hospitalization or medication, get people in earlier for diagnosis and treatment.

Another principle, also identified by Sheps, is that it is easier to measure achievement of such subsidiary objectives than to be sure that such achievement contributes to the broad objective. Evaluation of the quality of medical records or of patients' attitudes toward various doctors is much easier than measuring the contribution of these factors to quality of care. Baehr<sup>2</sup> cited a situation wherein physicians who have exceptionally good patient relationships and are very popular, are found, when their practices are studied, not to take off the diabetic patient's shoes and examine his feet, nor to use an ophthalmoscope on a hypertensive patient. Lee<sup>8</sup> said that in a certain group of physicians, one of the best men as far as competence and patients'

satisfaction are concerned, keeps perfectly miserable records. After 20 years of being pounded at, he still does not keep good records, but he does excellent work.

#### PROFESSIONAL INDICES

Turning to indices and measurement, Peterson and co-workers<sup>11</sup> at the University of North Carolina made a two-year study of general practice in the state. They had excellent cooperation from the practicing profession and studied family background, education and training, office facilities, types of patients and diseases, and quality of practice.

With regard to quality, they started from the premise that the physician's first responsibility is to make a diagnosis. As major criteria for classifying each practice, they used the well-tried methods for reaching a diagnosis of (1) taking a history, (2) performing a physical examination, (3) performing the indicated laboratory work.

Although they attached greatest importance to the process of arriving at a diagnosis, because without a diagnosis therapy cannot be rational, they also studied therapy, efforts at preventive medicine, and patient record systems. Examples of indices used in evaluating physical examinations are (1) disrobing, (2) ophthalmoscopy, (3) percussion of the chest, (4) examination of the abdomen, (5) rectal examination. Examples of indices of quality of therapy are (1) use of "shotgun" antibiotics for upper respiratory infections, versus attempts to separate viral and bacterial infections; (2) treatment of anemia.

The investigators reported: "There was tremendous variation in the quality of medical care given in the practices visited. . . . At its very best the practice of medicine resembled that carried out in the medical school. . . . The physician obtained thorough histories and performed careful, competent physical examinations of each patient. . . . Other physicians' performances were antipodal. These physicians practiced from their desk chairs. Histories were almost nonexistent. . . . Patients were seldom undressed or laid down for examination. Abdominal examinations were performed with patients sitting in a chair. The lack of attention to the patient's safety was demonstrated by unsterile technique in performing venipunctures and hypodermic injections."

As to practice in a strictly urban setting, Makover<sup>9</sup> in 1948-49 studied the 26 physicians' groups and later Woodruff<sup>14</sup> studied the 30 groups which were then giving care to the more than half a million (now 630,000) individuals through the Health Insurance Plan of Greater New York (HIP). As

indicators of quality, Makover studied selected clinical records and Woodruff studied clinical practice in addition to records.

Makover selected four categories of records, those having to do with cancer, with gastrointestinal disorders, with pediatric services and with health examinations. He analyzed about 25 case records in each category from each group studied.

On the basis of his findings, the 26 groups were classified into four levels of quality, ranging from the academic level of a teaching hospital service to a level so low that it was felt that the group should be either reorganized or disbanded. These findings documented the opinions of the Director and the Medical Control Board of HIP regarding the various groups. Far more than simply rediscovering what was already known, however, the study identified specific deficiencies in the various practices which could be and were corrected.

The Makover study proved so valuable that the Woodruff study on a broader base with more staff was initiated. Woodruff gave specific examples of improvement in the practice by individual physicians following completion of the study and detailed review of the findings with the physicians themselves: (1) Rechecks showed much improvement of clinical records of individual physicians within a few months; (2) Consultation and diagnostic services available in group practice were used more effectively; (3) More family physicians were working up their cases completely before seeking consultation; (4) Specialists were taking more seriously their responsibility to family physicians and contributing to their continuing education through reports and conferences.

Another illustrative study is that reported by Ciocco, Hunt and Altman.<sup>4</sup> Their report is one of a series from a study of group practice in the United States which I had the privilege of helping to initiate.

They examined the case records of a sample of 200 new patients in each of 16 groups. The information included chief complaint, number of visits, and the examination, tests, and treatments during a period of two weeks. They found substantial differences in these items among the groups. For example, in groups whose physicians had on the average the longest hospital training, patients received more general and rectal examinations, more x-ray services and more prescriptions for home treatment and diet. They received relatively fewer prescriptions for topical applications, cathartics and vitamins. In medical groups with higher proportions of certified specialists, patients were treated less frequently with sedatives and stimulants and hormones than were patients in other groups.

## EFFICIENCY

An important aspect of quality is efficiency. From the standpoint of whoever is paying for it, this includes economy. The American Motors Corporation administers a six million dollar a year insurance program which includes hospital and surgical coverage for 3,000 employees. A representative<sup>6</sup> of the company expressed the company's concern over the rapidly increasing cost of providing health care insurance over the preceding five years. A joint company and union study found that:

"There were indications of reduced hospital utilization in employee groups enrolled in comprehensive prepayment plans

"High standards of medical care were being maintained in clinics and hospitals where the doctors were practicing group medicine

"There appeared to be excessive use of hospital and surgical services in programs requiring the hospitalization of insured employees for the collection of benefit dollars

"There is a growing interest in the field of labor-management relations in considering direct health and medical service to employees."

## How to Achieve Quality

In considering achievement of quality, let me return to Esselstyn's definition that "medical care is of high quality to the degree that it is available, acceptable, comprehensive, documented and continuous and that adequate therapy is based on an accurate diagnosis and not symptomatology." It is clear that quality of care is not an absolute. We can never claim perfection in a field where human capability and judgment play so large a part.

Implicit in the specific aspects of quality that have been discussed in the examples cited are steps that can be taken to improve quality of medical care. Some of these are indirect. There are implications for medical education in both the Ciocco findings that methods of examination and treatment appear to vary with length of training of physicians, and the Peterson study of general practice in North Carolina. Peter Lee<sup>7</sup> discussed these implications in the Report of the Teaching Institute of the Association of American Medical Colleges on Medical Education and Medical Care.

It is implicit also that organization (or lack of it) for providing comprehensive medical care and the method of financing it materially affect its quality. Baehr<sup>1</sup> commented on the professional and social disabilities under which the family physician labors and the "episodic medicine" which results:

"One important element is the current practice of episodic medicine. Like the specialist, the family physician, as a rule, also waits for patients to seek

his services for some episode of illness. Between episodes, he is often uncertain whether he is still the patients' family doctor or whether they are obtaining medical care elsewhere. As he expects a fee for each professional service, he often fears that anything but a passive waiting attitude might be interpreted as a solicitation. . . . Episodic medicine is fostered by the fee-for-service system of remuneration."

In March 1961, the National Advisory Health Council reported to the Surgeon General of the U. S. Public Health Service<sup>10</sup> that whereas morbidity, mortality and service utilization rates indicate that medical care in the United States has become increasingly effective, the services have grown more complex, more specialized, more fragmented and more impersonal.

Esselstyn<sup>5</sup> told the New Hampshire Medical Society: "The day has gone by when any single physician can hope to provide the best there is in all the fields of medicine to any one patient. The increasing complexity of medical care has given rise to the need for the integration of the specialization of medicine. Accordingly, the last twenty years has seen a rapid growth of group-practice teams that enable doctors with different training but common philosophies to pool their skills for the benefit of patients."

From industry, one of my colleagues reports that a top personnel executive in one of the large corporations in America came to him last spring with a draft of a "white paper" he was preparing for circulation topside in his organization. This paper reasoned that medical care benefits for employees was the only important area of substantial expenditure in which his company had absolutely nothing to say about specifications, productivity, etc. He argued that in the interests of productivity alone, not to mention other advantages, his company ought deliberately, in association with the union, to set forth on the path of developing group practice to provide comprehensive care as a condition of their prepayment program.

A voice from the consumer was the AFL-CIO, which at its convention in December 1961 adopted a resolution calling for prepayment group practice as a means of improving quality of service. Section 3 reads:

"The greatest promise for more reliable financial protection and for greater value for the medical care dollar is presented by those plans which combine comprehensive prepayment with direct-service arrangements based on the group practice of medicine. In this setting, the financial and organizational arrangements are such, and the benefits are sufficiently broad, that medical rather than economic

considerations can determine what services are to be rendered."

These are a few samples of the many voices that are being raised from all quarters of our society, calling for higher quality comprehensive medical care through prepaid group practice. It is interesting, as Baehr<sup>3</sup> noted in his Milbank Memorial lecture last fall, that the early resistance within the medical profession of this country to group practice *per se* and to prepayment for medical care has now largely vanished. Opposition is now directed to the combination of group practice with prepayment capable of providing insured families with completely prepaid comprehensive medical care. Such prepaid group practice can compete advantageously with solo practitioners and specialists who charge a fee for each service. This is surely one of the reasons why this is sometimes given the derogatory term, "panel practice," which is considered by most of the profession to be evil.

Yet, in spite of difficulties, lack of understanding among the profession and the public, and active, sometimes unscrupulous, opposition, prepaid group practice is expanding. You have an outstanding example in the Kaiser Foundation Health Plan right here in California. Their enrollment grew from 632,000 on January 1, 1960, to 791,000 at the first of 1962. To care for this increase the contracting medical groups increased their staff from 604 to 744 physicians in the two years.

Another example is the Community Health Association of Detroit, which enrolled over 25,000 individuals when the rolls were opened for new members after a year of operation. This was a four-fold increase for this relatively new plan. Group Health Association of America has more requests for technical advice and assistance on "how to do it" from professional, consumer and educational groups over the country than it can fill.

#### CONCLUSION

Prepaid group practice offers unique advantages for the physician, for the consumer, and for society, as an efficient means of providing comprehensive medical care with quality control.

1. For the profession, it offers a team of colleagues with pooled skill and equipment, rotation for weekends, vacations and study. The physician—even the young one just starting practice—is surrounded by a group of well-trained individuals, all of whom want to see each other succeed.

2. For the consumer, it offers an available physician for medical emergencies—one who has been selected by his colleagues for his skill, responsibility and compatibility, and who is subject to their pro-

fessional discipline and enjoys their professional support. More than this, it offers him comprehensive service from an organization whose economic as well as professional interest is in keeping him well rather than merely caring for him when he is ill—and all this on a prepaid basis within his means.

3. For society, it offers an orderly means of combatting fragmentation of services for the patient and of eliminating the expensive distortions and duplications that are fostered by our unorganized specialization and partial coverage insurance programs. It provides a means, acceptable to both producer and consumer of health services, for controlling and meeting the mounting costs of medical care.

Willard Rappleye<sup>12</sup> said: "Health is vital because the capacity of the human to achieve is ultimately the most crucial social resource. . . . The obligation of health services is to maintain that capacity." Prepaid group practice can help to discharge this obligation by making the miracles of modern medicine available to our society.

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